



5

$\mathbb{F}_q[x_1, \dots, x_n]$ is the polynomial ring in n variables over \mathbb{F}_q . Let $I \subseteq \mathbb{F}_q[x_1, \dots, x_n]$ be an ideal. The quotient ring $\mathbb{F}_q[x_1, \dots, x_n]/I$ is denoted by $\mathbb{F}_q[x_1, \dots, x_n]/I$. The set of all elements in $\mathbb{F}_q[x_1, \dots, x_n]/I$ is denoted by $\mathbb{F}_q[x_1, \dots, x_n]/I$. The set of all elements in $\mathbb{F}_q[x_1, \dots, x_n]/I$ is denoted by $\mathbb{F}_q[x_1, \dots, x_n]/I$.